and their usage of the right-of-way. Chapter 4 states. in part:

4.15 UTILITIES - GENERAL

Utility facilities shall mean all privately, publicly, or cooperatively owned lines. facilities, and systems for producing, transmitting, or distributing communications. cable television, power, electricity. light. heat. gas. oil, crude products. ore, water. steam, waste, storm water not connected with highway drainage. and other similar items including fire and police signal systems and street lighting systems that directly or indirectly serve the public or comprise part of the distribution systems that directly or indirectly serve the public.

The AASHTO Manual under Acquisition for right-of-way says in part, "...in all instances where utility facilities are encountered (in highway construction work). every effort should be made to accomplish the most economical and best engineered adjustments and relocations possible." Appendix B, ITD's "A POLICY FOR THE ACCOMMODATION OF UTILITIES WITHIN THE RIGHT-OF-WAY OF THE STATE HIGHWAY SYSTEM IN THE STATE OF IDAHO' also has established policies that shall be used when utilities must be relocated within the right-of-way of the State Highway System.

The Railroad/Utility Engineer has the responsibility for all agreements connected with the movement of utilities when highway projects involve relocation of utilities at state expense. The District is responsible for the agreements covering relocation of municipally owned utilities within municipal boundaries. The Railroad/Utility Engineer will maintain liaison with the District in such instances.

In cases where irrigation districts or canal companies move their facilities at state expense, the facility will be treated as utilities.

For projects that require installation of a new telephone service, should contact the ITD General Services section for assistance.

District Design shall notify all effected parties of any changes *to* the fiscal year construction schedule.

The Secretary of the Board will notify a utility company of the requirement to relocate its facilities after a utility hearing is held or the utility company executes a Waiver of Hearing. The notification normally takes place after the bids for a project are opened. The notice and opportunity for a hearing and the authority *to* order utility companies *to* relocate their facilities are contained in Idaho Code 40-312(3). **Also.** see Administrative and Board policies A and B-14-08, Movement of Utilities, **for** information about movement of utilities and utility hearings.

4.15.1 Cost of Relocation Responsibility

Where **a** utility company has a right of occupancy by reason of holding the fee. an easement, or other property interest and the facilities do not occupy public road right-of-way under existing conditions. the cost of relocation under the project will normally be at state expense.

Where a utility company's facilities occupy **a** public road right-of-way under existing conditions. the cost of relocation under the project will normally be at utility company expense. Where **a** utility company's facilities were previously located on the public right-of-way at state expense under a prior project, the relocation under **a** new project will also be at state expense.

Another source for information on right of way access and ITD are the following 2 policies - Highway Access Control Policy and the Right-of-Way Use Policy.

ITD does not have a written policy for permits for fiber optic or broadband easements that are not owned by utility companies. They have **to** date only processed one permit **for** a non-utility application.

111. Railroads

In general, the railroads have **a** great amount of information about the engineering specifications and licensing requirements for any type of railroad encroachment or crossing. The construction requirements appear to be uniform **for** almost **all** of the railroads in this investigation. Each company clearly defines the permitting process and the processing or application fee required; however, ongoing yearly lease or rental payments are not set forth on the **various** company's website, although doubtless there is **a** yearly cost for the encroachment or crossing.

A. Burlington Northern Santa Fe Railway

The Burlington Northern Santa Fe Railway has published on their website, a Utilitv Accommodation Policy. The policy relates the requirements for the "accommodation. location and method of installation. adjustments. removal. and relocation and maintenance of utility facilities" on Burlington Northern & Santa Fe Railway Company (BNMSF) property. The policy describes utilities as "lines. facilities and systems for producing, transmitting or distribution communications. power, electricity. light, heat. gas, oil, crude products. water. steam, waste. storm water and other similar commodities which are privately. publicly or cooperatively owned and which serve directly or indirectly the public or any part thereof." The policy has requirements for utilities paralleling and crossing railroad property. The policy has design and construction requirements, as well as licensing and liability insurance requirements.

In Part 3. Utilities Paralleling Railroad Property, in underground installations. specifications for fiber optic lines are given. They are *to* be a minimum depth of 4.0 feet BNG (below grade) for fiber optic cable wirelines. and whenever feasible. the cable should be laid within 5 feet from property lines. A warning tape is also to be installed. 1.0 foot BNG directly over the underground power line where located on Railroad right-of-way outside the track ballast sections.

In Part 3, Utilities Crossing Railroad Property, in underground installations, specifications for fiber optic lines are given. The policy states. "The same requirements for electric power line crossings will apply for fiber optic line crossings except for the following: A minimum depth of4.0 BNG for fiber optic cable wirelines, and BNSF Engineering must approve any specialized equipment used to install cable. No rail plow will be allowed for installation purposes."

There is a $250 non-refundable processing fee *to* apply for a permit. BNSF uses the services of Staubach Global Services for professional Real Estate Services. The average cost of an electric line crossing is $2500. The cost for communications crossings is determined by BNSF. The costs for installations parallel to the [racks are based on the value of the area and calculated on a case by case basis. The minimum cost for a longitudinal installation is $2500. The average time for completion of the permitting process is 45 to 60 days from receipt of the application. There are additional costs that may be incurred for the appropriate licenses and insurance requirements.

B. Union Pacific Railroad

Union Pacific Railroad (UPRR) has extensive information on their web site about the use of their right-of-way on their property. On their website. in the section titled "real Estate & Utility Specs" they define installations in their right –of-way as "either pipeline or wireline. may be considered encroachments. crossings. or both. UPRR defines an encroachment as "a pipeline or wireline that enters the railroad company's right-of-way and either does not leave the right-of-way or follows along the *right-of-way* for some distance. They have clear and extensive requirements for *both* crossings and encroachments. While the information on the website does not specifically mention telecommunications uses, or broadband applications such as fiber optics installations, the website does not necessarily exclude such uses. and the specifications for wireline, although these specifications are geared towards electric installations, would most likely apply or be very similar.

UPRR requires at a minimum, an application form, a map of the location for the crossing or encroachment, and the appropriate exhibit "A," an engineering design for the crossing or encroachment,

for either the pipeline installation or the wireline installation. UPRR has specific procedures for wireline/pipeline encroachments, and for pipeline crossings. There is a section on the engineering specifications, with various requirements for different types of crossings. In the engineering specifications, pipelines for non-flammable substances are required to be below the frost line and not less than 4.5 feet below base of railroad rail. Crossings for telecommunications installations are not specifically mentioned in the section on pipeline crossings. The section on wireline crossings is geared towards electrical installations, both underground and overhead.

UPRR requires a non-refundable application fee of $1055 with the application. The applicant must also reimburse UPRR for any and all expenses I incurred for the review of the encroachment applications. The processing time is approximately 3 to 6 months. The appropriate licensing and insurance certificates are required prior to the start of construction. The website makes no mention of further fees beyond the application fee. No mention is made time constraints on the use of the right-of-way, for instance. both the US Forest Service and the Bureau of Land Management have 10 year leases. There is also no mention of continuing compensation for the use of the right of way, such as yearly lease payments or some other form of yearly rent.

C. Idaho Northern & Pacific

The Idaho and Pacific Railroad Company operates in Idaho and northeast Oregon. The Rio Grande Pacific Corporation maintains a 100% equity interest in the Idaho and Pacific Railroad Company. Neither the Idaho and Pacific Railroad's website, nor its parent company's website provided any information on encroachments in the right-of-way.

D. Montana Rail Link

Montana Rail Link, Inc. operates in Montana. Idaho, and Washington. It is a unit of the Washington Group of Companies headquartered in Missoula, Montana, and is privately held. The Property Management Division of Washington Corporations manages Montana Rail Link's property. The website has information on pipeline and wireline crossings and longitudinal installations.

The application process for installations includes a completed application with a non-refundable $600 review fee, There is a $325 processing fee required after an agreement has been executed along with the payment for the first year's permit fee. There is no information as to how the yearly permit fee is calculated, or the length of time for the permits.

E. Eastern Idaho Railroad

Eastern Idaho Railroad is a subsidiary of Watco Companies. In the property management section of the Watco Companies website. information is available about pipeline and wireline installation, as well as property leases and permit to access property, among other applications and specifications.

Wireline installations require much the same information as required by UPRR. There is a non-refundable application fee of $600. The agreement processing time is between 30 and 45 days. For underground wireline installations, there is a minimum of 5 feet below the base of rail for fiber optic cable wirelines, and a minimum of 5 feet below natural grade (BNG) for fiber optic cable wirelines. For

overhead installations, there is a minimum of 23.5 feet above top of rail clearance required. There is a minimum 4 feet clearance required above signal and communications lines.

The information provided on the website gives no indication of the ongoing requirements for lease or rental costs to be paid to the company, although there most likely **are** yearly rental or lease payments required. and would probably be calculated on a case by case basis.

ATTACHMENT E - STATE BY STATE STATUS REPORT

RESOURCE SHARING

STATE- BY- STATE STATUS REPORT
December 2001 Update

Question: "Does your State accommodate fiber optics / wireless communications on Interstate or other freeways?"

	Fiber Optics	Wireless	FHWA Resource Center or State	Interstate	Other Freeways	Interstate	Other Freeways	Comments
Eastern								
			Connecticut					
	Yes							
	(ITS.IMS and state use only)							
	No							
	Soon							
	No							

Fiber Optics - For State purposes only - Incident Management System (IMS) and Intelligent Transportation System (ITS). No resource sharing involved.
Wireless - A project has been authorized for State purposes only -- Digital Highway Advisory Radio (HAR) at six locations. No resource sharing will be involved.

			Maine					
	Yes							
	Yes							
	No							
	No							

Fiber Optics No resource sharing

			Massachusetts					
	No							
	Yes							
	Yes							
	Yes							

Fiber Optics - State gets lines in return for accommodation.
Wireless - State gets some wireless facilities in return.

New Hampshire
No
Yes
No
No

Fiber Optics - A short line was placed from the FAA center in Nashua to a nearby location along Route 3. No resource sharing was involved. Comments - Currently working on RFP for consultant to assist in determining State's best interest, consultant in place by the Fall of 2001

New Jersey
Yes
(ITS only)
Yes
Yes
Yes

Fiber Optics - ITS only.
Wireless - 5 installations as airspace agreements.

New **York**
Yes
Yes
Yes
Yes

Fiber Optics - Lines are installed on NY Stale Thruway. NYSDOT has continuing RFP for fiber projects on their R/W.

Puerto Rico
No
No
No
No

R/W sharing is under consideration.

Rhode Island
Yes
Yes
Yes
Yes

Fiber Optics - State obtained *2* conduits for state use in exchange for allowing private usage of R/W.

Vermont
No
No
No
No

Delaware
No
No
No
No

District of Columbia
No
No
No
No

Maryland
Yes
No
Yes
Yes

Fiber Optics - On most Interstates in central MD. Approximately 370 total miles.
Wireless - Ten towers have been installed along controlled access facilities. Towers accommodate multiple providers - as many as five providers per structure.

Pennsylvania
No
No
No
No

Resource sharing not permitted by state law on controlled access R/W. Turnpike is negotiating for joint use of fiber and wireless with private company.

Virginia
ITS only
ITS only
Yes
Yes

Wireless There are a number of installations with more to follow.

West Virginia
No activity as yet. Recent RFP was canceled. Future status is unclear

Southern

Alabama
No
No
No
No

ALDOT has appointed a committee to evaluate all aspects of placing both fiber & wireless facilities on Alabama freeways.

Florida
ITS only
ITS only
Yes
Yes

Fiber Optics - (see details in the body of the survey)
Wireless - A total of 70 towers are expected.

Georgia
ITS only
No
No
No

Fiber Optics For Slate purposes only. No resource sharing involved.

Kentucky
ITS only
ITS only
No
No

Fiber Optics - For State purposes only. No resource sharing involved.

Mississippi
Yes
Yes
No
No

Fiber Optics - One temporary Interstate installation and several installations on other freeways. No compensation. No resource sharing involved.

North Carolina
No
Yes
No
No

Fiber Optics - No compensation.

South Carolina
Yes
No
No
No

Fiber Optics - ITS use only, except one river crossing by Southern Bell

Tennessee
Yes
No
No
No

Fiber Optics - There is one installation on the 1-55 Bridge in Memphis. Committee is considering how to implement the law on future fiber-optic and wireless installations.

Texas
Yes
Yes
Yes
Yes

Fiber Optics - No compensation has been received. Utilities have a right to occupy the R/W. No resource sharing is involved as yet, but rulemaking underway.
Wireless - Two Interstate and two other freeway installations in the San Antonio area. No compensation

received. No resource sharing involved as yet

Arkansas
Yes
No
No
No

Fiber Optics - Lines have been installed on some Interstates (I-40 across state; some sections of 1-30, I-540, 1430). Received lines in exchange.
Wireless - Not allowed on any highway R/W at present.

Louisiana
Yes
Yes
Yes
Not yet

Fiber Optics On interstates, the charge is $5.000 per mile.
Wireless - One site.

New Mexico
Yes
Yes
Yes
Yes

Fiber Optics - State negotiating for Interstate and other State R/W accommodation partners
Wireless - One site operational.

Oklahoma
Yes
Yes
No
No

Fiber Optics - Seven lines in place
Wireless - None as yet.

Midwest

Illinois
Yes
No
No
No

Fiber Optics - Lines recently installed.

Indiana
Yes
No
No
No

Fiber Optics - Pilot project on the Indiana Toll Road, I-80/I-90, across the northern portion of the State. INDOT Toll Road Division compensated with cash and use of fiber capacity.
Wireless - INDOT is considering developing a RFP for wireless using certain facilities.

Michigan
Yes
Yes
No
No

No charge for use. Permit required with onetime permit fee of $1000/mile. Accommodation normally within 15 ft of fence. All installations are longitudinal.

Minnesota
Yes
Yes
No
No

Fiber Optics - The state's fiber optic network currently spans 250 miles along I-94 from Wisconsin to Fargo, ND. In February 2001, MnDOT terminated its agreement with a private consortium that was granted exclusive access to lay a fiberoptic network within state trunk highway R/W. The consortium was unable to fully finance the remaining network of 2.000 miles as originally proposed. MnDOT is committed to complete the network and is currently exploring other options.

Ohio
No
No
Yes
Yes

Fiber Optics - No private fiber optics longitudinally installed along Interstate or other Freeways. ODOT is reviewing its position on this subject and awaiting experience of other states.
Wireless - 23 towers on Interstate R/W and 3 towers on Non-Interstate freeway. 3 towers at ODOT District offices.

Wisconsin
Yes
Yes
No
No

Fiber Optics - WisDOT has received cash from $5.500 to $10,000/mile over a 20-25 year period, but could receive fiber. cash, or both. Access to other highways is free. 5 companies utilize controlled-access highways, Approx 320 miles and $1.8 million. State currently needs fiber for ITS /other applications.
Wireless - None to date, but some indicated interest. State allows towers at rest areas. weigh scales, or other safe R/W location, NOTE: For fiber/ wireless. a master agreement is prepared and permits issued per location.

Iowa
Yes
Yes
No
No

Fiber Optics - For State purposes only --the Iowa Communications Network (ICN). No resource sharing. Other commercial underground communications (fiber and copper) cables permitted for annual fee.

Kansas
Yes
Yes
No

No

Fiber Optics - On 25-mile section of Interstate maintained by the Kansas Turnpike Authority and on other freeways. Cash compensation in one case. KDOT has two shared resource projects. The statewide contract covers 550 miles of R/W from Kansas City to the Colorado border. through Lawrence, Topeka, and Salina, largely along 1-70, and from Salina south on 1-135 to Wichita.

Missouri

Yes
Yes
No
No

Fiber Optics - Some installations on interstate/other freeways. Only one installation (thru RFP process) in exchange for use of six strands of F.O. cable as backbone for MoDOT's ITS network. F.O. system value recognized under the FHWA Innovative Finance Program 8 $30 million soft match credit approved for future ITS projects.

Wireless - MoDOT seeks partners for the future.

Nebraska

No
No
No
No

Western

Colorado

Yes
Yes
No
No

Fiber Optics - Installations have been permitted in exchange for fibers to be used by CDOT.

Montana

No
No
No
No

MDT continues to study the effects of utility occupancy of interstate R/W

Wyoming

Yes (limited)
Yes
No
No

Fiber Optics - Installations permitted on freeway R/W. Interstate applications are reviewed separately on case-by-case basis. Compensation varies. Resource sharing under review. State Business Council and DOT involved in the review process.

North Dakota

Soon
Soon
No
No

Fiber Optics - NDDOT has considered the installation of fiber optics in the R/W. Negotiations with

a private vendor failed, and no additional requests have come forward

South Dakota
Yes
Yes
No
No

Fiber Optics - The SDDOT has installed fiber optics cable in the Interstate R/W. Other requests will be considered as the need arises. All schools (elementary, Middle and High Schools, and Universities) in South Dakota have been wired with Fiber Optics to make the Internet available to all SD Students.

Utah
Soon
Soon
No
No

Fiber Optics - Governor's Task Force recommendations and regulations being developed to respond to recent change in State law allowing compensation beyond basic permit fee.

Arizona
No
No
Yes
Yes

Wireless - One antenna has been installed on one overhead sign structure support located adjacent to the ramp between 1-10 and the Route 202 Freeway. Cash compensation was received.

California
State only
No
Yes
Yes

Fiber Optics - Installation for State purposes only. No resource sharing involved. Caltrans exploring options to develop fiber optics accommodation policy that would permit compensation in some form to Caltrans. Legislative changes would be necessary to revise State Code.
Wireless - Installations permitted on Interstate and other Freeways (access controlled) under State's "Licensing Process and Siting Guidelines". Cash compensation to Caltrans based on type of equipment and geographical location. (See website - http://www.dot.ca.gov/wireless/). Wireless telecommunication sites permitted on conventional highways as encroachments.

Idaho
No
No
No
No

Fiber Optics - Installations not permitted on Interstate R/W. Looking at hiring a consultant to prepare an RFP to offer fully limited access facilities (including the Interstate) for fiber installation in return for either barter or cash benefits. Use of other highways is anticipated.

RESOURCE SHARING
STATE-BY-STATE STATUS REPORT
April 2001 Update

Eastern Resource Center:

CONNECTICUT

FHWA Contact: Lester Finkle and John McAvoy, Connecticut Division (860) 659-6703. ext 3007
E-Mail Address: finkle@igate.fhwa.dot.gov and john.mcavoy@fhwa.dot.gov
State Contact: Robert Ritsick. ConnDOT (860) 594-3262
E-Mail Address: Robert.Ritsick@PO.state.ct.usa
Fiber Optics: Connecticut Department of Transportation (ConnDOT) policy does not permit fiber optics on interstate routes nor limited-access highways. On all other State routes, if the utility is regulated by the DPUC, the established permitting process is followed.
Wireless: Facilities have not yet been installed on any Interstate highway R/W in Connecticut. but the Division Office authorized a project involving Digital Highway Advisory Radio (HAR) at 6 locations. NO outside compensation was involved in the HAR installations. They had Federal/State transportation funding. The facility locations are outside the clear zone, in ramp median areas. The Division Office has been involved in the promotion of HAR. and in reviewing, providing comments, and approving Highway Advisory Radio (HAR) PSBE submittals. ConnDOT is also pursuing a pilot project allowing for a Request For Proposal to be promulgated relating to a specific site and allowing for a stipulated tower height. However. ConnDOT is not planning to change its stated policy.

MAINE

FHWA Contact: Ken Todd, (207) 622-8350 ext.12 E-mail: ken.f.todd@fhwa.dot.gov
State Contact: Brian Burne, Utility & R/W Services Manager, Maine DOT (207) 287-3681
E-mail address: Brian.Burne@state.me.usa
Fiber Optics: Lines have been installed on Interstate highway R/W in Maine and on other controlled access Federal-aid highway R/W in the State. No compensation has been received. The lines were installed outside the clear zone and are maintained from the mainline. The Division Office provides advice and approval.
Wireless: facilities have not been installed on Interstate highway R/W in Maine or on any other controlled access Federal-aid highway R/W.

MASSACHUSETTS

FHWA Contact: John McVann, (617) 494-2521 E-Mail: John.McVann@fhwa.dot.gov
State Contact: Michael Schwartz, Massachusetts Highway Department. (617) 973-7559
Fiber Optics: Mass. DPW has some installations on Route 128. State receives several lines in return
Wireless: State permits some wireless antennas, and receives some usage of these facilities.

NEW HAMPSHIRE

FHWA Contact: Martin Calawa. Area Engineer (603) 225-1609 E-Mail: Martin.Calawa@fhwa.dot.gov
Fiber Optics: The state is in the process of developing a RFP for a consultant to help them determine what would be in the best interest of the State regarding fiber installation. Basically, since the State does not have any experience with fiber they are seeking advice. In addition, they need to come to terms with what their own needs may be in the future. The plan is to have a consultant in place this fall, and to go to contract in 2003 for installation.
Wireless: New Hampshire presently does not have any wireless telecommunication facilities in Limited Access R/W. Pending legislation may dictate the use of "low towers" in the future in NH. This may mean more towers. but less obtrusive ones. They are also looking into these going into the NH R/W, but that is

still some time off.

NEW JERSEY

FHWA Contact: Keith Sinclair (609)637-4204 E-Mail: keith.sinclair@fhwa.dot.gov
Fiber Optics: NJDOT Contact: James Paral (609) 530-2488. Fiber optics lines have been installed on Interstate R/W and other NHS highway R/W. These facilities are State owned and operated. They were installed for State Traffic Management Systems purposes (i.e. computerized signal systems, etc). They have been located at various locations, including the median. Access occurs from the traveled way. (i.e. need traftic control with lane closure, etc). The Division Oftice reviews, approves proposed locations, and advises NJDOT as part of their review of contract plans.
Wireless: NJDOT Contact: Henry Soloway, (609) 530-3875 Wireless facilities have been installed in 5 locations on Interstate and other NHS R/W with additional installations proposed. Since wireless communications are not a public utility under State law. the installations are being done under airspace agreement provisions rather than a utility accommodation policy. The Division Office reviews and comments on conceptual plans for proposed Interstate locations and approves final plans. The Division Office has assisted the NJDOT in establishing guidelines and procedures for installation. approval of location sites, and final approval of installations.

NEW YORK

FHWA Contact: Tom Herritt, (518)4314125 ext. 233 E-Mail ThomasG.Herritt@fhwa.dot.gov
NYSDOT Contact: Richard Lee (518)457-4449 Utilities
Fiber Optics: Fiber-optic lines have been installed on the New York State Thruway, which is maintained by the New York State Thruway Authority (NYSTA). from New York City to Buffalo (+/- 500 miles). NYSTA is an Authority and not under the jurisdiction of NYSDOT. One of six fiber banks is dedicated to the NYSTA for their use with communications, ITS, and other things. In addition, phased in cash will be provided at years 5 thru 20, and complete ownership of all the fiber optic will be attained within the R/W after 20 years. Fiber-optic tines have been located mostly on the R/W line, but occasionally in the median because of environmental or other constraints. Maintenance will have to be performed from the mainline with a permit requiring proper work zone traffic control and other safety considerations. In addition, a 17-mile fiber-optic facility has been installed on 1-84. which is under the jurisdiction of the NYSTA. NYSDOT has a fiber-optic project completed on Interstate 87 from Albany to Canada and one in the design stage on NY Rt. 22 8 I-684. There are several routes on Long Island in the planning stage. The state receives eight governmental fibers, NYSDOT one empty duct. Revenue sharing does apply above a threshold. The Division Office has reviewed the fiber optic installation locations, approved those areas that required median installations, and advised of additional verbiage to enhance safety during installation and maintenance.
Wireless: Facilities (antennas) have been installed on Interstate 495 in New York State. The State receives a rental fee for accommodating the wireless installations (antennas). The antennas on the Interstate will be accessed for maintenance purposes from the mainline in some instances. Under a Site manager services agreement, NYSDOT R/W is to be used for wireless. Gross revenues are distributed 30/70 or 50/50 depending on who builds (or built) the facility. A proposal to rent antenna space on New York State Thruway Authority communication towers was discussed with the DO to confirm that FHWA approval was not required. There are also about a dozen wireless sites in development.

PUERTO RICO

FHWA Contact: Jose Torres (787) 766-5600x234 E-Mail: Jose.Torres@fhwa.dot.gov
Determination of R/W sharing not yet complete. Future DOT Intelligent Vehicle system and revenues are the only possible benefits now seen. PRDOT is installing conduits as part of widening projects in case accommodation decision is made.

RHODE ISLAND

FHWA Contact: Mike Butler (401)5284564 Email: MichaelJ.Butler@fhwa.dot.gov

State Contact: Robert Jackson (401) 222-2411 ext. 4525 E-Mail: Rjackson@dot.state.ri.us
Fiber Optics: Level 3 Communications, LLC has installed within the Interstate and other NHS Rights-of-Way, distance of approximately forty-six (46) miles. a minimum of nine (9) and a maximum of twenty-seven (27) one and one quarter inch conduits. Two conduits are State conduits, one conduit is vacant, and the other will have twenty-four (24) single-mode fibers for State use.
Wireless: Voicestream d/b/a as Omnipoint Holdings, Inc. has had an Agreement to erect twelve (12) monopoles within the Interstate and other NHS Rights-of-way since December 1997. To date eleven (11) sites have been identified and five (5) monopoles have been erected with two (2) monopoles hosting co-locators. Two additional monopoles are scheduled to be erected in 2001 bringing the total to seven (7).

VERMONT

FHWA Contact: Mark D. Richter. (802) 828-4423 E-Mail: mark.richter@fhwa.dot.gov
Fiber Optics: Fiber optic lines have not been installed on Interstate R/W or on any other controlled access Federal-aid highway R/W in Vermont. The Division Office has provided advice to the State.
Wireless: Facilities have not been installed on Interstate highway R/W in Vermont or on any other controlled access Federal-aid highway R/W. Division Office provides advice to the State.

DELAWARE

FHWA Contact: Robert Kleinburd (302) 734-2966 E-Mail: robert.kleinburd@fhwa.dot.gov
DelDOT: Gene Donaldson (302) 739-7786
Fiber Optics: Lines have not been installed on Interstate highway R/W in Delaware or on any other controlled access Federal-aid highway R/W.
Wireless: Facilities have not been installed on Interstate R/W in Delaware or any other controlled access Federal-aid highway R/W. 3/2001 - Delaware still does not have shared resource activity. Although fiber-optic lines are being installed along 1-95, it is being done in conjunction with the 1-95 Corridor Coalition. The 1-95 Corridor Coalition is an organization of Northeast States representatives gathered together to promote a coordinated ITS response. The most visible result of their activity is the EZ-Pass toll effort that involves the States from Maine to Delaware. Fiber-optic lines currently being installed will be used for coordinated ITS application, such as multi-state linked overhead signing messaging.

DISTRICT OF COLUMBIA

FHWA Contact: Ed Sheldahl. Bureau Operations Engineer & Tracy France, R/W, (202) 523-0163
Email: Tracey.France@fhwa.dot.gov
Fiber Optics: have not been installed on Interstate or other controlled-access R/W in the District. There are installations on other NHS routes in the District.
Wireless: Facilities have not been installed on Interstate or any other controlled access Federal-aid highway R/W in the District of Columbia.

MARYLAND

FHWA Contact: Ann Hersey. (410) 962-4342 ext. 135 E-Mail: Ann.Hersey@fhwa.dot.gov
Joseph Bissett, Statewide Utilities Engineer (410) 545-5546
Fiber Optics: Lines have been installed on Interstate R/W in Maryland on 1-70, 1-83. 1-95. I-270, I-295, and I-695, but have not been installed on any other controlled access Federal-aid highway R/W in Maryland. The State received conduit, fibers and monetary compensation. On approximately 685 total miles. cables were installed in the median, under the right hand shoulder, and beyond the right hand shoulder. All locations were within the R/W. Access is from the mainline. The Maryland Division and Region 3 offices worked with MSHA. providing guidance and approving the installations.
Wireless: Facilities have been installed on Interstate R/W in Maryland on 1-95 at MD 32 in Howard County. A tower replaced a high mast light pole and now has a light fixture attached to it. Wireless telecommunications facilities have been installed at 1-95 at MD32, I-270 at Montrose Rd. I-495 at MD185 and 1-695 at Greenspring Avenue. Eight towers have been installed along controlled access facilities. many near or within interchanges. Towers accommodate multiple providers - as many as five providers per structure. Additional tower sites are under consideration. 9 additional towers are proposed within the R/W

of both Interstate and other controlled access Federal-aid highways. The State will receive monetary compensation for these installations. approximately $24.000- $37.500. per site annually. The dollar amount varies by site. The Maryland Division and Region 3 Office worked together with MSHA to develop guidelines for the placement of wireless facilities within the highway right-of-way. The priorities below correspond to Maryland's "Wireless Telecommunications - Priority Checklist for Site Selection."

1. I-270 at Montrose Road - located along diagonal ramp of the interchange. Access is available from the left hand side of the diagonal ramp. (Priority 3 location)

2. I-495 at MD 185 - located along the mainline. but well outside the clear zone. Access is available from Kensington Parkway. a county road. (Priority 1 locarion)

3. I-695 at Greenspring Ave. - located in the infield area of the interchange. with access from Greenspring Ave. a county road. (Priority 1 locarion)

PENNSYLVANIA

FHWA Contact: Leland J. Kissinger. Utilities Specialty in the PA Division Office, (717) 221-3727
E-Mail Address: Leland.Kissinger@fhwa.dot.gov
State Contact: John Proud, Utilities Engineer, PennDOT Central Office (717-787-4038).
E-Mail Address EJProud@dot.state.pa.us
Fiber Optics: Fiber-optic lines have not been installed on Interstate highway R/W in Pennsylvania or on any other Federal-Aid highway W i n the State.
Wireless: Facilities have not been installed on Interstate highway R/W in Pennsylvania or on any other Federal-Aid highway VV in the State.
Comments: The Division Office has provided PennDOT with resource sharing information developed by FHWA HQ, as well as current practices from other states. PennDOT has been encouraged to consider developing resource sharing and partnering agreements with private utilities as a means of providing the communications infrastructure necessary to enhance present and future ITS systems.

VIRGINIA

FHWA Contact: Tim Lewis, (804) 775-3348 E-Mail: Timothy.Lewis@fhwa.dot.gov
VDOT Contact: Stuart Waymack (804) 786-2923 Waymack_SA@vdot.state.va.us
Fiber Optics: Fiber-optic lines have not been installed on Interstate highway R/W in Virginia or on any other Federal-Aid highway R/W in the State as part of Resource Sharing. However, an agreement is in the works for 1,200 miles of fibers to be installed. Fiber-optic lines have been installed in Northern Virginia for VDOT's traffic management system but this is not a part of resource sharing. Virginia plans to receive fiber infrastructure as compensation. More specifically, they will receive 18 fibers on 1,300 miles of rural Interstate. and 48 fibers on 148 miles of urban Interstate. It is VDOT's intention to locate these facilities far enough off the edge of pavement where access would not be a problem. The fibers must be placed so as not to interfere with the safe operation of the highways. The preferred location is to the right of the travel lanes, possibly outside of the clear zone or near the R/W line; however, fibers will not be located in the median.
Wireless: There are **65** sites that have been approved for wireless telecommunications installations on Interstate highways in Virginia. Some of these towers are under construction. Most of these facilities are in Northem Virginia and Suffolk, mainly on Interstate highways at strategic interchanges. Virginia will receive a combination of money and ITS infrastructure. Normally VDOT owns the tower. After a 5 year period, VDOT will receive approx. $1000/month from users of the tower. These tower facilities are going to be accessed from service roads, ramps, and secondary roads. Any access from mainlines has to be approved by the Division Office.

WEST VIRGINIA

FHWA Contact: Henry (Ed) Compton (304) 347-5268
E-Mail: henry.compton@fhwa.dot.gov
State Contact: Guy Mick, Utilities Supervisor (304) 558-3656 E-Mail: Gmick@dot.state.wv.us

Fiber Optics: Fiber optic lines have not been installed on Interstate highway R/W in West Virginia or on any other controlled access Federal-aid highway R/W.
Wireless: Towers have not been installed on Interstate highway R/W in West Virginia or on any other controlled access Federal-aid highway R/W. Comments: On November 15, 2000, the Governor's Office of Technology. the WV Department of Transportation. and the WV Parkways, Economic Development and Tourism Authority jointly issued a Request for Proposals from vendors to install and maintain a fiber optic communication network for as much as the area of the state as possible. On December 18,2000. Verizon Communications filed for an injunction in Federal court seeking to halt the opening of the proposals. Verizon claimed the RFP was in violation of the Telecommunications Act of 1996 and other state laws related to regulation of utilities. On December 19. 2000, at the request of the Governor, the RFP was canceled. It is unclear at this lime whether or not the RFP will be revised and reissued later.

Southern Resource Center:

ALABAMA
FHWA Contact: Linda Guin, (334) 223-7377 E-Mail:Linda.Guin@fhwa.dot.gov
Fiber Optics: Fiber-optic lines have not been installed on Interstate highway R/W in Alabama or on any other controlled access Federal-aid highway R/W. The Division Office has been monitoring ALDOT activities in this regard and providing education.
Wireless: Installations have not been installed on Interstate highway R/W in Alabama or on any other controlled access Federal-aid highway R/W. The Division Office has been monitoring DOT activities in this regard and providing education.
Comments: The Alabama DOT has appointed a committee to evaluate all aspects of placing both fiber and wireless facilities on Interstates and other access-controlled highways.

FLORIDA
FHWA Contact: Bill Wade, (805) 942-9650 x3021 E-Mail: Bill.Wade@fhwa.dot.gov
State Contact: Gene Glotzbach. FDOT (805) 414-7620
Fiber Optics: Fiber has been installed on Interstate highway R/W and other controlled access Federal-aid highway R/W in Florida on a limited basis by the Florida DOT to support ITS initiatives in urban areas. FDOT received and awarded a contract to Florida Fiber Inc. (FFN) to place fiber optic lines in all limited access highways in Florida. The Florida Division treated the installation as if it were a utility under our Utility Accommodation Agreement with FDOT. However, FHWA concurrence was required with the lease agreement because the UAM called for a permit and the lease was an exception to that policy. The current UAM prohibits longitudinal installation of utilities. Concerns about the environment were addressed throughout the process.. Subsequently, the FFN has not provided FDOT with the required financial plans and other resource commitments that they agreed to and FDOT has now written them a letter declaring FFN in default of the agreement and giving them 90 days to submit the required and promised materials. Also check out: http://wwwl1.myflorida.com/publicinformationoffice/fiber/finalppa.htm.
Wireless: Commercial wireless facilities are being installed on Interstate highway R/W in Florida as well as the Florida Turnpike facilities. Florida DOT has signed an agreement with Lodestar Towers. Inc. to market limited access rights-of-way for the installation of commercial wireless telecommunications facilities. The Florida DOT has the option of receiving a percent of the gross revenue generated at these tower sites or receiving services. In addition to limited access rights-of-way. Lodestar can utilize Florida DOT Maintenance yards as well as existing communication facilities for commercial wireless telecommunications. The first commercial wireless telecommunications facilities were erected in March of 2000 and through the course of the year. Lodestar expects to erect some 70 towers on Florida DOT property. Florida DOT has its own network of towers to support the call box communication system and the Florida DOT=s 47 MHZ land mobile communication system. Lodestar Towers, Inc. was selected through the RFP process with an agreement signed March 25, 1999. The Division Office has provided technical assistance.

GEORGIA

FHWA Contact: Bob Chaapel. (404) 562-3657 E-Mail: Robert.Chaapel@fhwa.dot.gov
Fiber Optics: GDOT has installed fiber-optic lines on Interstate R/W but only for their own use on 1-20. I-75, 1-85 and I-285 in the Atlanta area and I-475 in the Macon area to support the deployment and operation of their ITS network (no resource sharing involved). GDOT has not installed fiber-optic on any other controlled access facilities. The FHWA Division Office provided technical assistance and approved the installation.
Wireless: GDOT has not installed any wireless telecommunications facilities on Interstate or other controlled access facilities. The FHWA Division **Office** advises GDOT on wireless issues.

KENTUCKY

FHWA Contact: Evan Wisniewski. (502) 223-6740 E-Mail: Evan.Wisniewski@fhwa.dot.gov
Fiber Optics: Lines have not been installed on Interstate highway R/W in Kentucky or on any other controlled access Federal-aid highway R/W in the State, except for some that have been installed solely for highway use -- no resource sharing involved. The State is currently considering the use of the R/W by others.
Wireless: Facilities have not been installed on Interstate highway R/W in Kentucky or on any other controlled access Federal-aid highway R/W in the State.
Comments: The Kentucky Division has played an advising role on resource sharing.

MISSISSIPPI

FHWA Contact: Bob Webster. (601) 965-4228 E-Mail: RWebster@ms.fhwa.dot.gov
Fiber Optics: Lines have not been installed on Interstate highway R/W in Mississippi, except for a very minor amount on the Gulf Coast. Fiber-optic lines have been installed on other controlled access Federal-aid highway R/W in Mississippi, as with other utilities, on many non-Interstate 4 lane and 2 lane highways. No resource sharing has been involved. MDOT people are of the opinion that the same people who pay the rates are the same people who pay for the highway, and the utility company would just pass the cost of any remuneration back to the public. Accommodation of the Interstate fiber- optic lines has been by a year-to-year permit for the last 6-7 years because the utility hasn't been able to buy R/W and move. Utilities locations are usually limited to the last five feet of R/W limits if possible. The Division Office advises MDOT whenever asked and only **see** the permits that deal with utilities crossing the Interstate.
Wireless: Facilities have not been installed on Interstate highway R/W in Mississippi or on any other controlled access Federal-aid highway R/W.

NORTH CAROLINA

FHWA Contact: Dan Hinton, (919) 8564350 ext. 107 E-Mail: Dan.Hinton@fhwa.dot.gov
State Contact: Aydren Flowers, Utilities Coordinator (919) 733-7932
Fiber Optics: Lines have not been installed on Interstate or on any other fully controlled access highways in North Carolina. There have been some installations on partial controlled or limited access routes. No compensation was received for these installations. They were all installed near the R/W line and are to be accessed from existing access points or rampslfrontage roads, etc. - not from the mainline.
Wireless: Facilities have not been installed on Interstate or on any other fully controlled access routes in North Carolina. Comments The FHWA Division Office provides advice as needed on any issues relating to resource sharing. There has been no change in North Carolina since the review last year by the Office Of Program Quality Coordination. North Carolina officials have not changed their position relating to these facilities. At the present time, they do not believe it is worth pursuing. There has been one persistent inquiry from VIVX relating to fiber-optic lines along I-40 and 1-85, particularly between Greensboro and Durham. **but** the NCDOT has resisted the pressure and no facilities are planned.

SOUTH CAROLINA

FHWA Contact: **Steve Ikerd**, (803) 253-3885 E-Mail: Sikert@sc.fhwa.dot.gov
SCDOT Contact: Marion Leaphnn. (803) 737-1293
Fiber **Optics:** With the exception of a Southern Bell fiber optic cable crossing of the Cooper River **on** the **1-526** bridge in Charleston, the SCDOT has not allowed the installation of privately owned fiber optic lines within the R/W of an? controlled access facility. In return for allowing the Cooper River crossing in the early 1990's, the SCDOT

received fibers from the bridge site to the District office for use in the operation of a Fog Detection and Warning System. The SCDOT has installed and owns approximately 50 miles of fiber optic cable along portions of I-85. I-77. and I-26 for operation of freeway management components in the Greenville/Spartanburg, Columbia. Rock Hill. and Charleston urban areas. The SCDOT put out an RFP for a Statewide Shared Resource Contract (fiber-optics) on Oct. 26. 2000. They are currently evaluatiny the responses.
Wireless: The SCDOT has not allowed the installation of telecommunication towers within the R/W of any controlled access facility

TENNESSEE

FHWA Contact: Roger Port, (615) 781-5774 E-Mail: Roger.Port@fhwa.dot.gov
TNDOT - John Boynton (615) 741-2891
Fiber Optics: The first application of fiber-optic lines on Interstate highways in Tennessee was concurred in by the Division Office on 9-22-97 and involved the 1-55 Bridge in Memphis. Actual installation has not commenced. No longitudinal fiber-optic lines have been permitted along any other controlled access facilities in the State. TDOT will receive the exclusive use of six(6) unlighted fiber lines on the 1-55 Bridge installation. The lines are to be installed along the outside of the bridge structure, but no direct access will be allowed from the through roadway or ramps for initial placement or future servicing of the fiber optic lines. The Division Office has been instrumental in forwarding legal and operational guideline publications, as well as current informational material, to TDOT management and has conducted a one-day joint seminar with TDOT officials. and representatives of Apogee Research, Inc. and the Missouri DOT on 11-19-96.
Wireless: Facilities have not been installed on Interstate or any other Federal-aid controlled access highways in Tennessee.

TEXAS

FHWA Contact: Lee Gibbons, Utilities Coordinator, Texas Division (512) 916-5516
E-Mail Address: Lee.Gibbons@fhwa.dot.gov
Fiber Optics: Lines have been installed on Texas Interstate highway R/W and on other controlled access Federal-aid highway R/W in accordance with the TxDOT Utility Accommodation Manual. These lines have been installed by companies that are considered utilities. and no resource sharing has taken place as yet. No compensation was received since the companies had a right to occupy the right of way. These fiber optic lines are located outside the frontage roads, outside the clear zone near the R/W line. They will be maintained from the frontage roads and side streets. Texas has an extensive system of frontage roads along the Interstate and other controlled access highways throughout the state, and utilities are generally located between the frontage road and R/W line along these highways. The Division has not had any involvement in these lines since they are approved by TxDOT using permit procedures. Resource sharing efforts are well underway. with rulemaking procedures underway. A pilot implementation effort will then follow as a need is identified. Comments: TXDOT is currently considering installing a fiber-optic cable between Odessa and El Paso in the median.
Wireless: Facilities have been installed on Interstate R/W at two locations the TxDOT Central Office R/W (Utility) Section is aware of in the San Antonio area. There are also two wireless installations on other controlled access Federal-aid highway R/W in the San Antonio area. TxDOT did not receive any compensation for these installations since the companies erecting the facilities were considered utilities with a right to occupy the R/W. These facilities on the R/W are monopole tower assemblies. The support cabinets have generally been placed off the R/W. The towers located on the R/W are located near the R/W line outside the clear zone and will be accessed from the frontage road or side street. One pole is located in a benign location from the safety standpoint outside the frontage road in an interchange area. The Division Office does not have an active role but does communicate with the TxDOT Central Office R/W section on this subject occasionally.

ARKANSAS

FHWA Contact: David Blakeney (501) 324-6438 E-mail David.Blakeney@fhwa.dot.gov
State Contact: Perry Johnston, Utilities Coordinator, AH&D (501) 569-2321
E-Mail Address: Perry.Johnston@AHTD.state.ar.us
Fiber Optics: Lines have been installed on some Interstates (I-40 across state; 1-30 from Little Rock to Hope; I-540 MO line to Ft. Smith through tunnel facility. 1430 from I-40 to 1-30) and on 1-55. All lines installed near fence line, with pull boxes outside access line at each interchange. AH&D has access to each pull box, and are assigned space/lines at each regeneration site in exchange.
Wireless: Not allowed on any highway R/W at present.

LOUISIANA

FHWA Contact: Pete Nyberg. (225) 757-7625 E-Mail: Peter.Nyberg@fhwa.dot.gov
LADOTD Contact: Tom Harrell. P.E. (225) 379-1509 E-mail: thomasharrell@dotd.state.la.us
Fiber Optics: Fiber-optic cables can be placed along non-controlled access freeways at no charge to the utility. Along controlled access freeways and Interstate highways fiber-optic lines can be placed for a charge of $5,000 per mile (a one time charge). This charge may be waived in return for shared resources. The LDOTD published a Rule for Fiber Optic permits in the Louisiana Register on December 20. 1999 allowing fiber-optic lines and for resource sharing of the lines. LDOTD will ask for resources for their use in any agreement. Money obtained from this endeavor will be deposited in the Right of Way Permit Processing Fund. There are eight companies installing lines along Interstates as of April 1, 2001.
Wireless: Towers are allowed but only one tower has been installed in a rural Interstate Highway Interchange. The fees are low annual fees but higher than usually obtainable in other areas. Fees are based on area where tower will be located (higher fees in metropolitan areas, lower in rural areas).

NEW MEXICO

Contact: Joe Edwards, NM Division (505) 820-2024
E-Mail Address: JosephE.Edwards@fhwa.dot.gov
State Contact: John Rocha - NMSHTD Utility Section Chief (505) 827-5357
The State of New Mexico has a process in place & in use that enables the placing of wireless sites within State R/W. The State is currently developing a process to enable the placement of wire line (fiber-optic) facilities within Interstate and other state R/W. One cellular tower is operational.

OKLAHOMA

FHWA Contact: Jim Carver (405) 605-6040 E-mail: James.Carver@fhwa.dot.gov
State: Lynn Whitford. Utility Manager-ODOT (405) 521-2641;
Alan Stevenson, Traffic Engineering Division-ODOT (405) 521-2861;
Gary Brown. Oklahoma Turnpike Authority (405) 425-3646
Fiber Optics: Oklahoma currently has a fiber-optic facility in place that begins at the Texas/Oklahoma State Line and extends to Oklahoma City along Interstate Highway 35. The facility continues along Interstate Highway 44 to the Missouri/Oklahoma State Line. The Transportation Commission was the Authoritative body that granted an exception to current policy. The facility was placed under the supervision of the Department of Transportation. Resource sharing was a factor in the agreement to place this facility within Interstate Highway R/W. The facility was placed at no cost to the State. The State received exclusive use of 12 fibers (4 Lighted). The State would not be responsible for the maintenance of the facility. All future costs associated with Highway Construction requiring relocation would be born by the company. Traffic Engineering Division is currently working on the placement of a Fiber Optic facility along a route that involves various Interstate Highway Rights- of- Way that are associated with the future Intelligent Transportation System.
Wireless: Not allowed at this time.

Midwest Resource Center:

ILLINOIS

FHWA Contacts: Don Keith, R/W, (217) 4924640 E-Mail: Don.Keith@fhwa.dot.gov
Peter Hartman, Eng. Team Leader (217) 4924622 Peter.Hartman@fhwa.dot.gov
Fiber Optics: Lines have been installed this past year for the first time on the Interstate right of way. Williams Communications has installed fiber optics ducts (including a duct for state communications) along and near the access control fences along I-270 from St. Louis, 1-55. I-155 and 1-74 to Peoria and along 1-55 between Bloomington and Bolingbrook. IDOT has resisted proposals from telecommunications providers to install fiber optics ducts along and within the Interstate medians. and all installations to date are along and within a few feet of the access control fences. The State will receive service in kind, i.e., their own separate fiber optics duct. Additionally, the State is receiving rental payments, based upon approved appraisals, for the permits given to Williams to longitudinally occupy the Interstate right of way.

INDIANA

FHWA Contact: Dennis Lee, Indiana Division, (317) 226-7487
E-Mail Address: Dennis.Lee@fhwa.dot.gov
Fiber Optics: The INDOT has not allowed any fiber optics installations along roads under their jurisdiction, except for the Indiana Toll Road which is 1-80 / 1-90 across the northern portion of the State and is 251 krn in length. The Toll Road Division of INDOT had some fiber optic lines in place but they were outdated. They are now involved in a pilot project with new lines to be installed. There is no Federal money in this effort. Because of some concerns by INDOT about legal issues concerning use of the Right of Way, a Request for Information (RFI) has been sent to potential users to determine potential needs and usage of a fiber optic system. Even though no decision has been made, INDOT is currently leaning toward working on 1-65 and 1-64 as the initial effort. The information from the RFI will help them to decide where the first efforts will occur, An alternative that INDOT is considering is to possibly tie into the existing State Police wireless network.
Wireless: INDOT does not have wireless installations, but are considering a request for proposals (RFP) for wireless communications using certain facilities such as tower light supports. The City of Indianapolis currently has an RFP out trying to get private industry as partners in a wireless system. The State and we are anxiously awaiting the outcome.

MICHIGAN

FHWA Contact: John Wiesner, (517) 377-1880, Ext. 40 E-Mail : John.Wiesner@fhwa.dot.gov
MDOT Contact: Mark Dionise (517) 373-7682. E-Mail address: dionisem@state.mi.us.
Fiber Optics: Lines have been installed on Interstate highway R/W in Michigan and also on other controlled access Federal-aid highway R/W in the State. Compensation has consisted of a Permit Fee of $1000 per mile. Lines have been located outside the clear and will be maintained from fence line. cross roads. or ramps, with exceptions.
Wireless: Facilities have not been installed on any Interstate highway R/W in Michigan or on any other controlled access Federal-aid highway R/W in the State. The Division Office has played a minimal role thus far.

MINNESOTA

FHWA Contacts: Jim McCarthy (651) 291-6112 or Pete Kiernan (651) 291-6106
MnDOT Contacts: Adeel Lari 651-282-6148 or Bob McPartlin (651) 2964337
Web Site: http://www.dot.state.mn.us/connect/ Fiber Optics: On December 23. 1997, the Minnesota Department of Transportation (MnDOT) entered into an agreement with a private consortium granting them ***exclusive access*** to ***lay a*** fiber optic network within state trunk highway right-of-way. The Minnesota trunk highway system consists of Interstate. NHS, and other principal arterials. Leading the consortium was International Communications Services (ICS)/Universal Communication Networks (UCN) from Denver, Colorado. Under this agreement, the consortium was to construct a 2,200 mile fiber optic network that included three loops, going to the northern and southern portions of the state as well as to the Twin Cities metropolitan area. In exchange for this accommodation within trunk highway right-of-way, the consortiurn would provide all state, city and county agencies, as well as public and private schools and universities, free access to the network, up to 20-30% of capacity. The consortiurn had the right to lease the remaining

capacity to other entities on a non-discriminatory basis. In February, 2001. MnDOT and the Minnesota Department of Administration terminated the agreement with ICS/UCN to build the fiber-optic network because the Consortium could not garner sufficient financing to complete installation along the remaining 2,200 miles. After reviewing its options, the state decided that it was not practical to further amend the contract. To date, private sector investment in the project exceeds $30 million in fiber-optic cable and conduit. The network currently spans 230 miles along 1-94 from the Twin Cites to Moorhead. An additional 20-mile segment will soon be operational along 1-94 from the Metro Area east to the Wisconsin border. Most of the network is comprised of two 2-inch PVC conduits. One PVC conduit is empty, the other contains 192 fibers in an .8-inch cable. In the Twin Cities metro area the number of conduits may vary.
Wireless: Towers have not been installed on any trunk highway right-of-way. Currently, MnDOT is planning and evaluating whether to go forward with an RFP for Wireless Communication. No decision has been made to date.

OHIO

FHWA Contact: Richard Henry (614) 280 -6842. E-Mail: Richard.Henry@fhwa.dot.gov
ODOT Contact: Steven D. Cheek (614) 466-3877.
Fiber Optics: No private fiber-optic lines have been installed longitudinally in Ohio. There have been transverse (crossings) installations. There are also a few municipal or MPO longitudinal installations for ITS purposes in some of the major metropolitan areas. ODOT is reassessing its past position on this issue and is currently waiting to the experience of other states programs.
Wireless: There have been tower installations on both Interstate and Limited Access Urban Freeways. 29 towers have been approved (23 on Interstate and 3 on Urban Freeways) There is also 3 installations on ODOT District property. Each provider must enter into *a* Statewide Master License Agreement and an individual Site Agreement for each site. The license fee is based on a schedule and ranges in price from $9.200 to $25,250 per year with periodic adjustments of 3.5% per year for each site depending on the Site location (Urban, Suburban, Rural Suburban, or Rural) and the number of antennae on the tower. In addition, a $10.000 security deposit is required for each installation until the aggregate of the deposits equals $100,000 for an individual carrier. Each carrier must make space available for co-locator carriers and pay ODOT half the fee or half of the scheduled fee which ever is greater, and provide a space for the State Multi Agency Radio Communications System (MARCS) and other ITS applications at no charge.

WISCONSIN

FHWA Contact: Roger Szudera (608) 829-7508 E-Mail: Roger.Szudera@fhwa.dot.gov
WisDOT Contact: Robert Fasick (608) 266-3438 / (608) 267-7856(fax); robert.fasick@dot.state.wi.us
Fiber Optics: -WisDOT may receive compensation in fiber, cash, or both for long. installations on controlled-access freeways and expressways. Access to other state highways is free.
Wireless: No wireless accommodation to date, but companies have indicated interest. WisDOT would allow installations at rest areas, weigh scales, or another safe R/W location for a tower. NOTE: for fiber and wireless, a master agreement is prepared and permits issued for each location.

IOWA

FHWA Contact: Gerry Kennedy. (515) 233-7317 E-mail: Gerald.Kennedy@fhwa.dot.gov
Iowa DOT: Larry Heinz (515) 239-1373 lheintz@max.state.ia.us
Dave Widick (515/) 233-7903 dwidick@max.state.ia.us
Fiber Optics: Lines have been installed on Interstate highway R/W in Iowa and also on other controlled access Federal-aid highway R/W in the State. These fiber-optic lines comprise the Iowa Communications Network (ICS) system and other underground communications lines. The ICS system is State owned and operated for State of Iowa business only; therefore, the State has access to the R/W as needed at no cost. Other underground communications systems pay a yearly rental fee, and these facilities have been located as close to the R/W line as possible. Facilities on freeways will be accessed from adjacent lands outside the R/W. Facilities on non-freeways can be accessed from within the R/W. The Division Office has approved longitudinal occupancy.
Wireless: Facilities have not been installed on any Interstate highway R/W in Iowa or on any other

controlled access Federal-aid highway R/W in the State. The Division Office has been involved in talks with IDOT about the possibility of facilities in the future, but has neither encouraged nor discouraged at this time.

KANSAS

FHWA Contact: Jason Cowin (785) 267-7284 E-Mail Jason.Cowin@fhwa.dot.gov
KDOT Contact: Man Volz, ITS Coordinator. (785) 296-6356, mattv@ksdot.org
Fiber Optics: Lines are currently being installed as part of two KDOT shared resources contracts with Digital Teleport. Inc. (DTI). The first contract, covering147 miles, was awarded for the Kansas City metropolitan area in conjunction with an on-going ITS design project (Kansas City Scout) and a Missouri DOT fiber optic shared resources project with DTI on the Missouri side of the project area. The second contract, covering 550 miles, was awarded for a statewide system along 1-35. 1-70. I-435, I-635, US-69, US-169. K-10. and K-7. Both contracts were awarded in response to a KDOT RFP and are intended to provide the fiber-optic backbone for KDOT's ITS infrastructure. Each contract is approximately 90-95% complete. Prior to these shared resources contracts with DTI. fiber optics lines had only been installed on one section of Interstate R/W in Kansas. a 25-mile section maintained by the Kansas Turnpike Authority (KTA).
Wireless: Facilities have not yet been installed on Interstate R/W or any other controlled access Federal-aid highway R/W in Kansas. KDOT invited a wireless vendor in to explain the issues involved with wireless towers on State R/W, but has not yet taken action in this area.

MISSOURI

FHWA Contact: Bob Thomas, (573) 636-7104 E-Mail: Robert.Thomas@fhwa.dot.gov
MoDOT Contact: James R. Zeiger (573) 522-5994
Fiber Optics: lines have been installed on Interstate highway R/W in Missouri and on other controlled access Federal-aid highway R/W in the State. Under the terms of the public-private partnership with Digital Teleport Inc.. MoDOT allowed placement of the fiber optic cable on highway R/W in exchange for use of 6 of the 24 strands of the fiber optic cable as the backbone of MoDOT's ITS network. No investment of public money was required. In addition, the value of the fiber optic system has been recognized under the FHWA Innovative Finance program and a $30 million soft match credit for use on future ITS projects. Originally, the fiber optic line was intended to be buried 20 to 30 feet from the edge of pavement. However, after installation was initiated. topography dictated the best location for the fiber optic cable was in the median. Access for maintenance purposes is only allowed from frontage roads or crossroads in accordance with current MoDOT policy. No access from the mainline is permitted.
Wireless: MoDOT issued RFP's in September, 1997 and again in the fall of 1998 which were intended to lead to a shared resources public-private partnership with the telecommunications industry to support deployment and operation of the Intelligent Transportation System in Missouri. MoDOT had planned to allow placement of wireless facilities where mutually acceptable sites are identified on MoDOT property in exchange for goods and services that support ITS deployment and operation. A few firms responded to each RFP and a potential telecommunications partner was identified each time, however, in both cases. negotiations were not successfully concluded because mutually acceptable terms could not be reached. MoDOT has also recognized additional potential conflicts with wireless facilities on the right-of-way during anticipated widening of major Interstate facilities in the future. At this time, MoDOT is not actively pursuing a wireless shared resources partnership.

NEBRASKA

FHWA Contact: Ed Kosola. (402) 437-5973 E-Mail: Edward.Kosola@fhwa.dot.gov
Fiber **Optics:** Lines have not been installed on Interstate R/W or on any *other* fully controlled access highway R/W in Nebraska, except for crossings.
Wireless: Facilities have not been installed on Interstate R/W or on any other fully controlled access highway R/W in Nebraska.

Western Resource Center:

COLORADO

FHWA Contact: Scott Sands, (303) 969-6703, ext 362 E-Mail: Scott.Sands@fhwa.dot.gov

Fiber Optics: Lines have been installed on Interstate highway R/W in your Colorado and on other controlled access Federal-aid highway R/W. The Colorado DOT received fibers for their own use as compensation. Installations were made in the R/W but are not considered to be a maintenance problem. The DO provided advice and encouragement.
Wireline/Wireless: Facilities have not been installed on any Interstate highway R/W in Colorado or on any other controlled access Federal-aid highway R/W in the State. A revised utility accommodation plan has been submitted to DO for approval that addresses the wireline and wireless telecommunication facilities.

MONTANA

FHWA Contact: Carl James, (406) 449-5302 ext. 237 E-Mail: Carl.James@fhwa.dot.gov
Fiber Optics: Lines have not been installed on any interstate highway right-of-way in Montana.
Wireless: Facilities have not been installed on any interstate R/W to date or on any other controlled access federal-aid facility. Comments The MDT has appointed a Task Force to fully evaluate the merits of utility occupancy, including pipelines, of the interstate R/W.

WYOMING

FHWA Contact: Galen Hesterberg. Wyoming Division, (307) 772-2012. ext. 45
E-Mail Address: Galen.Hesterberg@dot.fhwa.gov
WYDOT Contact: Dave Braden (307-7774133) e-mail: dbryde@state.wy.us
Fiber Optics: Lines have not been installed on any Interstate highway R/W in Wyoming, but have been installed on other controlled access Federal-aid highway R/W. Compensation under consideration by WYDOT and State Business Council for future installations. WYDOT dictates locations and pushes all facilities to the outside limits of the R/W. Access for maintenance is typically from the highway, as the R/W is fenced. Where available, access for maintenance is recommended from outside the R/W through a locked gate. The DO has provided information, discussed pros/cons, and encouraged development of State policy to consistently respond to requests.
Wireless: Facilities have not been installed on any Interstate highway or any other controlled access Federal-aid highway R/W in the State. Very few requests have been received by WYDOT. Current requests have been denied due to concerns about tower and guy line locations and safety. WYDOT and State Business Council will review future requests for placement and compensation. The DO has provided information, discussed pros/cons, and encouraged development of State policy to consistently respond to requests.

NORTH DAKOTA

FHWA Contact: Rob Griffith, (701) 250-4349 E-Mail: Robert.Griffith@fhwa.dot.gov
Fiber Optics: Lines have not been installed on any Interstate highway right-of-way or any other Federal-aid highway right-of-way in the state.
Wireless: Facilities have not been installed on any Interstate highway right-of-way or on any other Federal-aid highway right-of-way in the State. The DO has been providing advice, and assistance. Comments: The North Dakota DOT had negotiated with AT&T for the installation of fiber-optic cabling. However, negotiations have failed, no additional services being proposed.

SOUTH DAKOTA

FHWA Contacts: Ken Erlenbusch (605) 224-7326, x3027; E-Mail: Ken.Erlenbusch@fhwa.dot.gov
Utilities - Ginger Maisie. (605) 224-7326,x3037;
ITS - Craig Gunslinger. (605) 224-7326. x3047.
Fiber Optics: The SDDOT has installed fiber-optic cable in the Interstate R/W. Other requests will be approved as they are received. The Governor mandated that the World Wide Web be made available to all schools (public and private) in South Dakota. This project has now been completed. All schools (elementary. Middle and High Schools, and Universities) have been wired with fiber-optic cable to provide Internet service to all schools. This required installing fiber-optic cabling on many miles of non-Interstate rights-of-way. The DO is providing advice and assistance.
Wireless: Facilities have not been installed on any Interstate highway right-of-way or on any other Federal-

aid highway right-of-way in the State.

UTAH

FHWA Contact: Dan Pacheco. (801) 963-0078 x231 E-Mail: Dan.Pachecho@fhwa.dot.gov
UDOT - Orlando Jerez. Chief Utility/Railroad Engineer olerez@dot.state.ut.us
4501 South 2700 West, Salt Lake City. Utah 841 19-5996 Tel: (801) 965-4032 Fax: (801) 965-4338
Fiber Optics: Lines have not been installed on any Interstate highway or other highway in the State to date. A Governor's Task Force has presented a series of recommendations to the Legislature on what policy to follow to allow the State to benefit from the value of accommodating these lines. Regulations are being drafted to allow several options for charging, as the Legislature passed permissive legislation in April 1999.
Wireless: No activity to date. State utilities accommodation manual is on our web page located at **http://www,dot.state.ut.uslesdlManuals/Utilitiesiutilities.htm**

ARIZONA

FHWA Contact: Philip Bleyl (602) 379-3913 Email: phillip.bleyl@fhwa.dot.gov
Craig Stender. (602) 712-8865. Arizona DOT contact for Fiber Optics E-mail: cstender@dot.state.az.us
Dennis Barker. (602) 712-7230, is the Arizona DOT wireless contact E-Mail: dbarker@dot.state.az.us
Fiber Optics: Arizona issued a statewide RFP in July 1998. The RFP requested a communications firm(s) to provide communications infrastructure with the Department as a joint user. Two proposals were received. Both were reviewed by the Attorney General's Office for legal sufficiency. They rejected one proposal as non-responsive. The other is now being evaluated. It is expected that the Department will decide how to proceed by the end of the calendar year. To be considered responsive, proposals, at a minimum, had to include private ownership, operation, construction, and maintenance of communications infrastructure while providing the state with capacity and other enhancements in exchange for entrance into highway right-of-way. A fiber-optic communications network was preferred, but other systems would be considered. Much of the selection criteria are based on the number of statewide needs that would be met and on the quality and capacity to be provided. The type of system, capacity, equipment. and other enhancements provided to the state should first focus on the Department's need to expand ITS capabilities (a copy of the plan was made part of the RFP). The most effective proposal would be a plan for a statewide network. However, proposals for only one region or corridor would be considered. Additionally, ADOT made it clear that while it believed that only one proposer would be selected for any specific route, the Department reserved the right to select more than one proposer when it was in the best interest of the state to do *so.* The proposal also required an explanation of how other entities could be accommodated with in a single system. ADOT's purpose was to ensure competition was not inhibited, while providing the greatest benefit to the state.
Wireless: They currently have 8 providers under Master Lease Agreements. The Master Lease sets the basic terms. provisions and restrictions. Individual sites are leased under a separate site agreement which attaches to the Master Lease. New sites or collocations are requested by a provider and then advertised for competing bids. If no competing bids are received, which is usually the case, an Individual Site Agreement is executed. We currently have approximately 45 site agreements with some 15 pending.

CALIFORNIA

FHWA Contact: Bill Todd (916) 498-501 1 E-Mail: William.Todd@fhwa.dot.gov
Caltrans Contact: Scott Atkins E-Mail Address Scott_Atkins@dot.ca.gov
(Fiber): Peter Schultze, (916) 654-2346 (Wireless) Bruce Wilson, (916) 654-4139
Fiber Optics: Lines have not been installed on Interstate highway R/W in California or on any other controlled access Federal-aid highway R/W, except by Caltrans for State purposes and in a few instances by others as an approved exception to the approved freeway utility accommodation policy. Approved exceptions for fiber-optics are now subject to Caltrans receiving compensation and excess capacity (conduits) - these conduits are then available lo others (with compensation). The goal is to restrict

construction activities in the right of way. Legislative changes may be necessary to clarify authority to receive compensation.
Wireless: There are installations on Interstate R/W and on other controlled access Federal-aid highway R/W in accordance with Caltrans A Licensing Process and Siting Guidelines established for their Telecommunications (Wireless) Licensing Program. Compensation to Caltrans consists of cash based upon type of equipment and geographical location, ranging from $10,980 to $23.280 per site per year. Increases effective July 1, 2001 result in a new range from $11.364-$24,096. Guidelines have been established taking safety, functional. and aesthetic considerations into account. Access to wireless facilities is to be from outside the R/W. The DO has final review/approval authority over all wireless proposals on Federal-aid highways, including construction plans. environmental documents, collocation. and assignments. This and extensive related technical information is available through their website - http://www.dot.ca.gov/wireless

HAWAII

FHWA Contact: Laura Kong (808) 541-2700 ext. 328. E-Mail: Laura.Kong@fhwa.dot.gov
State Contact: Michael Amuro. HDOT. (808) 692-7332.
Fiber Optics: Lines have been installed at one Interstate location for the State's own use in traffic management purposes The military has one installation on a state route that links the military bases through AT&T's HITS program. There is another private provider that traverses over 30 miles of State and city routes. This one installation sometimes runs longitudinal in the right-of-way and sometimes traverses the roadways.
Wireless: All installations are on Oahu and are at each of the tunnels located on H-3, SR-63, and SR-61. All active wireless providers are required to form a consortium that proposes a plan to coordinate installations. HDOT Right-of-way Branch reviews and approves plans. They then issue4 individual annual leases to each provider. Lease fee charged is based on a fair market value of the wireless site plus a $2,000 security deposit per site. The consortium constructs sites and maintains them. Each provider also pays a pro-rata share of the cost of any utilities used because they are tapping into HDOT's power source.

NEVADA

FHWA Contact: Jeff Weinman, (775) 687-5334. E-Mail: Jeff.Weinman@fhwa.dot.gov
State Contact: Heidi Mireles. NDOT. (775) 888-7840. E-Mail Address HMireles@dot.state.nv.us
Fiber Optics: Three conduits have been installed, one of which contains a 100-fiber cable on Interstate (I-80) highway right-of-way in Nevada. It is within a 20-foot controlled access corridor between California and Utah known as the "Williams Project." A longitudinal, nonexclusive permit has been issued to multiple users for a minimal fee. Lateral lines are within secondary routes.
Wireless: NDOT is continuing to develop policy. Facilities have not been installed on any Interstate highway right-of-way. The FHWA Division Office will continue to provide advice to NDOT.

ALASKA

FHWA Contact Person: Aaron Weston, (907) 586-7427
E-Mail Address: Aaron.Weston@fhwa.dot.gov
Alaska has not yet had any experience with resource sharing activities

IDAHO

FHWA Contact Person: Cathy Satterfield (208) 334-9180 x125
E-Mail Address: Cathy.Satterfield@fhwa.dot.gov
Idaho has not yet had any experience with resource sharing activities

OREGON

FHWA Contact: John Gernhauser. (503) 5874708. E-Mail: John.Gernhauser@fhwa.dot.gov
Fiber Optics: Oregon has accommodated fiber optics within Interstate right-of-way as an exception to its policy. ODOT is considering a policy on resource sharing. There was no compensation other than the normal administrative fee associated with the permit. Locations have been either traverse crossings under

the roadway or attached to structures.
Wireless: Facilities (towers, etc) have not been installed on Interstate or any other controlled access facilities in Oregon

WASHINGTON

FHWA Contact: Jim Leonard, (360) 753-9408. E-Mail: James.Leonard@fhwa.dot.gov
WSDOT Contacts: Al King, WSDOT. Operations Engineer and Light Lanes Project Director. (360) 705-7375.
E-Mail Address kinga@wsdot.wa.gov
Gerry Gallinger, Director of Real Estate Services. (360) 705-7305.
E-Mail Address galling@wsdot.wa.gov
Fiber Optics: The Seattle Project North Environmental document has been approved and an agreement executed. The project is moving forward. The 1-5 South, 1-90 and 1-82 (East & West) environmental document is currently being worked on.
Wireless: WSDOT has a model airspace lease agreement that permits wireless on all highways if highway operations and safety are not compromised.

FOR CORRECTIONS OR ADDITIONS - CONTACT:

Janis Gramatins - Email: janis.gramatins@fhwa.dot.gov
FHWA Office of Real Estate Services
202-366-2030

or

Paul Scott - Email: paul.scott@fhwa.dot.gov
FHWA Office of Infrastructure
202-366-4104

This page updated March 14.2002

ATTACHMENT F- RESOLUTION ON ACCESS TO PUBLIC RIGHTS-OF-WAY AND PUBLIC LANDS, FEBRUARY 2002 WINTER MEETINGS IN WASHINGTON, D.C.

Resolution on Access to Public Rights-of-Wav and Public Lands. February 2002 Winter Meetings in Washington. D.C.

WHEREAS. Federal. State. and local governmental entities have a legitimate and important role in managing their rights-of-way and public lands: and

WHEREAS, Local government efforts to promote deployment of advanced services have been exceedingly valuable; and

WHEREAS, The rights-of-way practices of certain of these entities have emerged as a significant barrier to the deployment of advanced telecommunications and broadband networks since passage of the 1996 Act: and

WHEREAS, Prompt. nondiscriminatory access to public rights-of-way and public lands at reasonable rates. terms, and conditions is essential to the development of facilities-based competition. the deployment of state-of-the-art telecommunications services to the public and the implementation of facilities-based/broadband network redundancy to safeguard against network outages; and

WHEREAS, **Most** States do not have pro-access laws, and ambiguities in the laws ***of*** some of those states that do have such laws have undermined compliance; and

WHEREAS. Existing federal, State, and local laws have not prevented certain governmental entities from imposing unreasonable compensation and other concessions that have increased the cost, delayed. or prevented deployment of these critically needed facilities; and

WHEREAS, The failure of a governmental unit to provide prompt, non-discriminatory access to public rights-of-ways and public lands - free of unreasonable compensation **or** conditions. might pose an insurmountable barrier to entry to new carriers offering innovative **facilities-basedibroadband** and other services; now therefore be it

RESOLVED, That the Board of Directors of the National Association of Regulatory Utility Commissioners (NARUC), convened in its February 2002 Winter Meetings in Washington, D.C., encourages all governmental entities to act on applications **for** access to public rights-of-way in **a** reasonable and fixed period of time, to treat **all** providers uniformly and in a competitively neutral manner consistent with applicable federal and State law. to ensure that their control over access to public rights-of-way and public lands is used to facilitate, and not to create an unnecessary burden to, the deployment of telecommunications facilities in the form of increased costs or delays, and to consider the impact of setting compensation above actual and direct costs on the deployment of advanced telecommunications and broadband networks; and be it further

RESOLVED. That NARUC encourages municipalities and managers of public lands to provide prompt, non-discriminatory access to requesting carriers at reasonable rates and terms. consistent with environmental stewardship and other management responsibilities; and be it further

RESOLVED. That NARUC supports the vigorous enforcement of existing access laws by local governments, State Commissions. the FCC and other federal agencies. as well as the adoption of right-of-way access laws where none exist. and the review or reform of existing local. State and federal measures to ensure that rights-of-way access is eliminated as an actual or potential barrier to deployment: and be it further

RESOLVED. That the NARUC create a Study Committee on Public Rights of Way. to consist of members of the NARUC Telecommunications Committee, and the Telecommunications Staff Subcommittee and the Staff Subcommittee on Accounting and Finance. and be it further

RESOLVED, That the study committee is charged to develop recommendations for reducing the extent to which rights-of-way access serves as a barrier to the deployment of advanced telecommunications and broadband networks: and be it further

RESOLVED. That the committee shall invite participation by the industry and by groups representing agencies and governments that own public lands **or** offer public rights of way and other organizations representing governmental interests; and be it further

RESOLVED. That the committee shall report recommendations at the NARUC Summer meeting in 2002 at Portland, Oregon, for adoption by NARUC.

Sponsored by the Committee on Telecommunications
Adopted by the NARUC Board **of** Directors February 13,2002

ATTACHMENT G - RESOLUTION ON RECOMMENDATIONS FOR PROMOTING BROADBAND FACILITY ACCESS TO PUBLIC RIGHTS-OF-WAY AND PUBLIC LANDS FOR 2002 NARUC SUMMER MEETING AT PORTLAND, OREGON

Resolution on Recommendations for Promoting Broadband Facility Access to Public Rights-of-way and Public Lands

WHEREAS. In February 2002, NARUC adopted a resolution encouraging all governmental entities to act on applications for access to public rights-of-way in a reasonable and fixed period of time. to treat **all** providers uniformly and in a competitively neutral manner consistent with applicable federal and State law, to ensure that their control over access to public rights-of-way and public lands is used to facilitate the deployment of telecommunications facilities; and

WHEREAS, That resolution also created a Study Committee on Public Rights-of-way and charged it with developing recommendations for reducing the extent to which rights-of-way access serves as a barrier to the deployment of advanced telecommunications and broadband networks: and

WHEREAS, The Study Committee invited and received participation by the industry and by groups representing agencies and governments that own public lands or offer public rights-of-way and other organizations representing governmental interests; and

WHEREAS. The Study Committee has produced a report that outlines several possible methods to address the competing interests involved: and

WHEREAS. The report of the Study Committee contains several views regarding the issues; now therefore be it

RESOLVED, That the Board of Directors of the National Association of Regulatory Utility Commissioners, convened at its 2002 Summer meetings in Portland Oregon. offers its thanks to the Study Committee and all those that have submitted ideas and participated in the Rights-of-way project and without endorsing the report recommends that regulators. academia. units of government and all industry sectors carefully review the report of the Study Committee on Public Rights-of-way.

Sponsored by the Committee on Telecommunications
Adopted by the NARUC Board of Directors July 31. *2002*

§253

(a) IN GENERAL. -- No State or local statute or regulation. or other State or local requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.

(b) STATE REGULATORY AUTHORITY.-- Nothing in this section shall affect the ability of a State to impose, on a competitively neutral basis and consistent with section **254,** requirements necessary to preserve and advance universal service. protect the public safety and welfare, ensure the continued quality of telecommunications services. and safeguard the rights of consumers.

(c) STATE AND LOCAL GOVERNMENT AUTHORITY. -- Nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and non-discriminatory basis. for the use of public rights-of-way on **a** nondiscriminatory basis. if the compensation required is publicly disclosed by such government.

(d) PREEMPTION. -- If. after notice and public comment. the Commission determines that a State or local government has permitted or imposed any statute. regulation. or legal requirement that violates section (a) or (b), the Commission shall preempt the enforcement of such statute, regulation, or legal requirement to the extent necessary to correct such violation or inconsistency.

I-ROW'S Supplemental Views on the NARUC Study Group's Report on Rights-of-way

The members of I-ROW appreciate the opportunih to participate in this process and wish Io commend the members of the NARUC study group 0n rights-of-way for their efforts. Their report will serve as a useful information source for those seeking to identify and resolve issues that impact deployment of competitive and broadband services.

I-ROW members. including competitive local providers, long distance carriers and incumbent local providers, agree that:

the actual and direct costs telecommunications providers impose upon the public rights-of-way constitute fair and reasonable amounts properly recoverable from telecommunications providers and

the majority of units of government do not impose unreasonable delays or fee structures that inhibit or prohibit the deployment of telecommunications infrastructure.

A problem does exist, however. I-ROW members continue to experience unreasonable delays or non-cost based fee structures in some locations. Sound public policy does not support such results. It is important to remember that fees for accessing public rights-of-way are passed on (often as line-item charges) to end-user customers. Further, delays in the deployment of networks deny service choices to customers. not only in the immediate community, but also in other communities that the planned network is intended to serve. Finally. case law establishes that local governments hold public rights-of-way in trust for the public and that appropriate compensation for use of public rights-of-way should be cost-based.

Many discussions at NARUC meetings and elsewhere have stressed the need for more rapid deployment of broadband capabilities and for lower prices for broadband services. However, it cannot be denied that fees for access to public rights-of-way that are above the actual and direct costs of managing the nghts-of-way serve to increase consumers' costs for broadband offerings or that excessive delays in granting permits slows or prevents the deployment of broadband offerings.

Excessive fee structures (e.g. those based upon percentage of gross revenues) are inappropriate and unlawful. In the instances where non-cost based fees have been imposed on a carrier, those fees have had an adverse impact on broadband deployment. If the practice were to become more widespread, it would further exacerbate the negative impact on the deployment of new and innovative services that

consumers and government desire.

Finally, seven United States District Courts. the United States Court *of* Appeals for the Ninth Circuit and the Supreme Court of Iowa have held that. under section 253 of the Telecommunications Act of 1996, local govemments may only charge fees that are "directly related to the carrier's actual use of the local rights-of-way.'' It should be noted that while some courts have held that municipalities are permitted to charge franchise fees that are not cost-based. those cases cannot be reconciled with economic reality in that they assume industry members and local governments negotiate at arms-length over the use of public rights-of-way, nor are those cases consistent with the legislative purpose behind section 253.

I-ROW'S ten recommended measures follow. Adoption of these recommendations would serve to advance the objectives of rapid and affordable competitive and broadband services.

TELECOMMUNICATIONS INDUSTRY RIGHTS-OF-WAY WORKING GROUP

Adelphia Business Solutions
ALTS
AT&T
BellSouth Telecommunications, Inc.
CompTel
e.spire Communications, Inc.
Global Crossing Ltd.
Level 3 Communications, LLC
Metromedia Fiber Network
Qwest
SBC
Sprint
Time Warner Telecom
Velocita
Verizon
Williams Communications, LLC
WorldCom

RECOMMENDED MEASURES TO PROMOTE PLBLIC RIGHTS-OF-WAY ACCESS

• Access to public nghts-of-way should be extended to all entities providing intrastate, interstate or international telecommunications or telecommunications services or deploying facilities to be used directly or indirectly in the provision of such services ["Providers"].

• Government entities should act on a request for public rights-of-way access within a reasonable and fixed penod of time from the date that the request for such access is submitted, or such request should be deemed approred.

• Fees charged for public nghts-of-way access should reflect only the actual and direct costs incurred in managing ihe public nghts-of-way nnd the amount of public rights-of-wnv actually used by the Provider. In-kind contributions for access to public rights-of-way should not be allowed.

• Consistent with the measures described herein and competitive neutrality, all Providsrs. including government owned networks, should be treated uniformly with respect to terms nnd conditions *of* access to public rights-of-way. including with respect to the application of cost-based fees.

• Entities that do not have physical facilities in. require access to, or actually use the public rights-of-way, such as resellers and lessees of network elements from facilities-based Providers. should not be subject to public rights-of-way management practices or fees.

• Rights-of-way authorizations containing terms, qualification procedures. or other requirements unrelated to the actual management of the public rights-*of-way* are inappropriate.

• Industry-based crirenn should be used to guide the development of any engineering standards involving the placement of Provider facilities and equipment.

• Waivers of the right to challenge the lawfulness of particular governmental requirements as a condition of receiving public nghts-of-way access should be invalid. Providers should have the right to bring exisnng agreements, franchises, and permits into compliance with the law.

• Providers should have a private right of action to challenge public rights-of-way management practices and fees, even to the extent such practices and fees do not rise to the level of prohibiting the Provider from providing service.

• The Federal Communication Commission should vigorously enforce' existing law and use expedited procedures for resolving preemption petitions involving access to public rights-of-way.

Rights-of-way: Local Governments' View

Introduction

Local Government' has been an active participant in the NARUC "Rights-of-Way" Study Group ("Study Group") effort from its inception. An unbiased effort to address the concerns of government and industry regarding rights-of-way could only be of benefit to Local Government and its constituents. Further. Local Government supports the development of broadband technologies and new communications services and feels a regulatory environment that favors competition is the best way to foster new growth and innovation. What Local Government does not support is growth and innovation at any cost.

Competition among telecommunications providers has brought more construction to streets. businesses, and neighborhoods than ever before. Simply encouraging the growth of broadband deployment in our neighborhoods cannot be the only goal of nghts-of-way policy. Local Government needs to balance the interests of local taxpayers with those of local telecommunications users and address issues such as traffic congestion, public safety, repeated disruptions of PROW, costs of inspection of the PROW. and the wear and tear on our local streets. These issues are not merely nebulous regulatory issues: they present very real financial and physical challenges to local budgets and streets. Local Governments must manage construction in the PROW and bring order to what often is a scene of considerable chaos.

The Study paper fails to acknowledge these real local concerns in its call for a uniform nationwide access and fee structure. Such a national model which deprives Local Government of its "police powers" to protect the public health, welfare and safety while providing for "rent free" occupation of the rights-of-way are unworkable solutions. For that reason Local Government laments a missed opportunity to advance broadband deployment by NARUC and offers these supplemental views.'

I. The Study Fails to Demonstrate Local Government's actions are a barrier to entry

Telecommunications providers are pursuing entry strategies based on market factors, nor local right-of-way policies and regulations. Furthermore, it is well pasr time for NARUC, the Federal Communications Commission and NTIA to state emphatically that state and local governments do nor srand in the way of competition or of the deployment of broadband facilities. Our residential citizens hungry for broadband deplovmenr and our commercial enterprises advance with the improvements resulting in price and speed rhar a competitive marketplace for bandwidrh provides. Therefore local governments seek to promote facilities-based competition through the efficient./air managemenr and pricing of public rights-of-way essential to a predictable, vigorous broadband marker. Public rights-of-way should be ncirhcr a source of subsidy nor a barrier to advanced network. Local governments rake seriously their duty to steward scarce public resources and to provide competitive access to local markers without damaging innocenr third parries.

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[1] These comments are offered on behalf of the National Association of Telecommunications Officers and Advisors (NATOA), the National League of Cities (NLC), the United Stares Conference of Mayors and the National Association of County Officials (NACO) hereinafter referred to as "Local Government."

[2] These supplemental views are in addition to the detailed edits Local Government offered during the Study Group process which may be round at wulr.natoa.org and the recently published "Right of Way Best Practices" manual crafted by the referenced four leading national associations of local officials at www.nic.org

Evidence of local governments. pro deployment stance may be found in the cable industry's broadband deployment. Predominately regulated by local government. cable has either won or is winning the race to bring broadband to the home. If local government had been the barrier to deployment claimed by many of the carriers, one would have to wonder how according to the National Cable & Television Association the cable industry has been able to deploy broadband to over seventy million homes by December 31, 2001?[3]

II. Local Government has a protected property rights interest in the PROW.

National and state rights- of-way policy, even under the banner **of** promoting broadband deployment. must recognize the rights of local governments under the U.S. Constitution and the Telecommunications Act of 1996 ("1996 Act"). The Study Group's report has either failed or refused to recognize local governments' property interest. held either in fee or in trust, in the right-of-way which has recently been valued at over **$4** trillion dollars'.

· The U.S. Constitution protects local governments' propert). rights in public rights-of-way.' The Constitution also protects the federal form of government, reserving **to** states and local governments all powers not delegated to the United Stares. including all authority to manage use and disruption of local public rights-of-way.

1) Section 253 of the Telecommunications Act of I996 was crafted to balance the interests of federal. state. and local governments. and to preserve the local management of public rights-of-uay The 1996 Act recognized the nghts of local

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[3] *See* http://www.ncta.com/industry_overview/indStat.htm

[4] See TeleCommUnity Valuation tiled at the FCC and available on TeleCommUnity's homepage.

[5] Case law substantiates that a franchise providing access to the right-of-way is an interest in real propert).. ***See*** *Group W Cable v. City of Santa Cruz*, 669 F. Supp. 954. 973 (N.D. Cal. 1987), *citing Cox* ***Cable San*** *Diego* ***v.*** *County of San Diego*, 185 Cal. App. 3d 368 (Cal. App. 4th Dist. 1986)("a cable franchise grants a taxable possessory interest in real property. **A** cable operator's license to use the public thoroughfares bears such an indicia of a possessoly interest as exclusiveness. durability, independence and private benefit.")
Further support for the proposition that a franchise is a real property interest is found in federal case law saying that franchise fees. which companies must pay for use of the right-of-way. are "in the nature of rent." As far back as 1823, the Supreme Court recognized that public utilities use rights-of-way in a way that is an "absolute. permanent and exclusive appropriation." *St. Louis v. Western Union Tel.*, 148 U.S. 92. 98-99. 13 **S.** Ct. 485.487-88 (1893). The Court in *St. Louis* went on **to** explain this unique relationship. "who would question the right of the city to charge for the **use** of the ground rhus occupied. or call such charge a tax, or anything else except rental? ***So,*** in like manner. while permission to a telegraph company to occupy the streets is not technically a lease. and does not in terms create the relation of landlord and tenant. yet it is the giving of the exclusive use of real estate. for which the giver has a right to exact compensation. which **is** in the nature of rental." *id.*
More recently. the Fifth Circuit has recognized the leasehold-like nature **of** a cable franchise. "[f]ranchise fees are not a tax. however. but essentially a form of rent: the price paid to rent use of the public right-of-ways." *City of Dallas, Texas v. FCC*, 118 F.3d **393.** 397-98 (5th Cir. 1997). *See also* ***Pacific Tel. & Tel.*** *Co. v. City of Los Angeles.* 282 P.2d 36. 43 (Cal. 1955): *Erie* ***Telecommunications*** *v.* ***Erie. 6.59*** F. Supp. 580. 595 (W.D. Pa 1987), *aff'd* ***on other*** *grounds*, 853 F 2d 1084 (3d Cir. 1988). In ***BellSouth Telecommunications.*** *Inc., v. City of Orangeburg*, 337 S.C. 35, 522 S.E.2d 804 at § 1 (S.C. 1999), the court debunked the assumption that any payment that generates revenues for a local government must be a tax. even if it arises from a market transaction in which the payer receives valuable use of an asset in exchange for the payment. The *White Plains* decision. a New York federal district court decision in 2000, also spoke to the question of a telecommunications franchise fee based on **gross** revenues to reflect the market value of the local community's property. While *TCG New York, Inc. v. City of White Plains*, 125 F. Supp. 2d 81 (S.D.N.Y. 2000). held that burdensome application requirements plus a lengthy approval process could constitute a prohibition on entry mggenng § 253(a), it also held that fair and reasonable compensation extends beyond mere costs. In fact the court upheld compensation requirements reflecting a gross revenues fee and a fixed annual fee.

governments to control and manage their rights-of-way and to obtain fair compensation for right-of-way use. The legislative history shows that Congress inserted § 253(c) specifically to preserve local authority over reasonable rights-of-way compensation and management. and drafred § 253(d) to ensure that the courts. and nor federal agencies. have jurisdiction over § 253(c) issues.

2) Limiting local government right-of-wok compensation to **less** than marker value does **not** recognize the scarce and valuable nature of public-rights-of-way. Compensation should assure **that** the right-of-way *is* dedicated to its highest and best use and avoid wasteful consumption of this precious resource. The federal government does **not** give away either its spectrum or **its** federal lands at cost. but rather has crafted auction policies. **For** instance. spectrum. like right-of-way space. is a scarce resource **that** is most efficiently allocated through a marker price mechanism. It **is** inconsistent for the federal government **to** auction spectrum at the highest possible price while at the same time asserting thar local government property should be given away to telecommunications companies at below marker compensation. If local governments are to protect their property interests. they must be free to **seek** appropriate efficient pricing mechanisms. including revenue-based measures. to establish such compensation.

III. Right-of-way Management By Local Governments Is Necessary to Balance the Competing Demands Placed Upon Local Rights-of-way.

Local communities work with telecommunications providers and other rights-of-way users to resolve problems and make rights-of-way work efficient. When telecommunications providers refuse to cooperate. or ignore legitimate requirements. people get hurt and physical assets are damaged.' Too often, providers fail to abide by local government standards of right-of-way management.

Subject to the police powers of local government. public rights-of- ways can be partially occupied by utilities and other service entities for facilities used in the delivery. conveyance, and transmission of services rendered for profit as such deployments may enhance the health. welfare, and general economic well-being of the community and its citizens. Every states' rights-of-way statute, including the Study Groups' recommended Michigan statute, includes specific language to preserve the police powers of local government to protect the health, welfare and economic well-being of the community. Local Government therefore would respectfully recommend to any legislature considering rights-of-way legislation to employ the following Purpose Section and authorizing clauses:

Purposes

The purpose of this legislation is

- manage a limited resource to the long-term benefit of the public;
- promote competition in the provision of telecommunications services and ensure that citizens have a wide variety of services available to them by establishing clear and consistent rules by which providers may occupy the public rights-of-way;
- recover the costs of managing the public rights-of-way;
- recover fair compensation for those parts of the public rights-of-way occupied by telecommunications and interactive computer service providers in their businesses;
- prevent premature exhaustion of capacity in the public rights-of-way to accommodate communications and other services; and
- minimize inconvenience to the public occasioned by the emplacement and maintenance of telecommunications and interactive computer service facilities in the public rights-of-way.

' *See* NATOA's tiling with NTIA. for an illustrative list of such nghr-of-way disasters.

Additionally the statute should include language such as the following taken directly from the Michigan Rights-of-way:

> (*) This section shall not limit a municipality`s right to review and approve a provider's access to and ongoing use of public right-of-way or limit the municipality's authority to ensure and protect the health. safety, and welfare of the public.
> (*) This section shall not limit the permitting agency's enforcement mechanisms included in a permit **or** authorizing ordinance, including the imposition of specific performance or impositions of fines and interests.
> (*) This section shall not limit the right of the permitting agency to require the provider to move or relocate facilities when such movement is required for the public's health. safety or welfare.

IV. Bankruptcy

The proposed statute is silent as to the treatment of the equipmenr of bankrupt telecommunications utilities. While until recently such a predicament was hard to imagine. recent events has proved the state and local government must address the potential challenge. For that reason, Local Government suggests the following language for consideration in the development of rights-of-way legislation:

> **BANKRUPTCY AND ABANDONMENT**
> **Section ** Nothing in this act shall be construed as to limit the ability of a municipality to establish terms and conditions in a permit to address issues of equipment distribution and ownership in the event of bankruptcy or abandonment.**

V. Fair and Reasonable Compensation is not limited to Costs

The Report and its model statute are flawed as they *are* founded on the erroneous belief that **47** U.S.C. Section 253 limits local government to the recovery of costs. Congress rejected the industry's lobby effort to limit fees to the recovery of costs and instead clarified in the only amendment to the act adopted on the floor of the House. that local government was authorized to manage its rights of way and require "fair and reasonable" for access to those rights-of-way.

The rationale behind the Congressional decision to preserve the ability of local government to charge rent to telecommunications providers for residing in local rights-of-way is simple. Local government as either the owner in fee of the rights-of-way. or holder of the property in trust for tax payers should not be forced to provide renr free access to such property.

Local Government. therefore. offers **the** following legislative language which represents **a** means to recover fair and reasonable compensation as provided under **the** Act.:

This section is verbatim from **the Michigan legislation.**

Just and Reasonable Fee Structure*

(1) The governing body of a city may assesses the following fees as just and reasonable compensation for the use **of** the public rights-of-way which includes the recovery for the taxpayers **of** the jurisdiction a payment for rent or other compensation for the economic value of the property rights used within the riehts-of-wav.:

(a) An access line fee of up to a maximum of $X.XX per month per access line, with an increase of **$.XX** every six ***(6)*** years thereafter; or

(b) An access line fee of up **to** X% of gross receipts.

(2) The permitting agency and the provider may reach mutual agreement on the value of fees in the form of in-kind facilities or services so long as the provision of such in-kind fees does not result in the fees exceeding the maximum amounts established in the act.

Conclusion and Additional Resources

Because of agreed to page limitations for the supplemental views of local government, our analysis and suggestions must stop at this point. A detailed commentary on the Study Report. including a red-lined model statute are available electronically from the homepage of the National Association of Telecommunications Officers and Advisors at www.natoa.org. Additionally, information and copies of Local Government's manual on best practices for rights-of-way management may be obtained from the National League of Cities at www.nlc.org.

* **This** language comes from the recently enacted nghts-of-way statute in Kansas.